Update on SAP HANA Cloud Platform Strategy for Line of Business (LoB) Extensions

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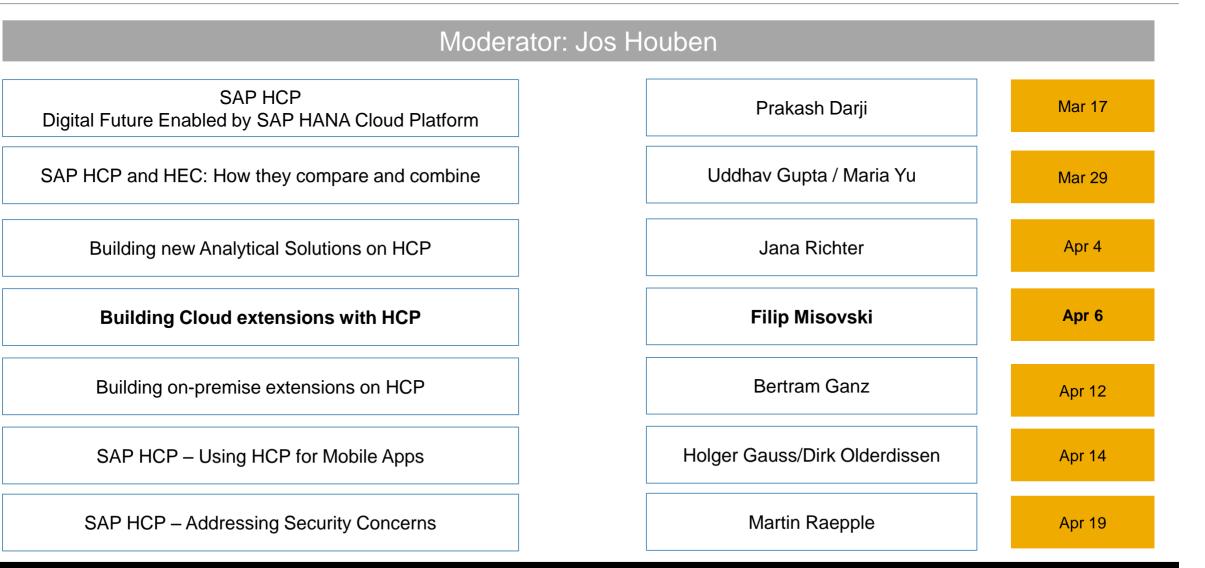


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SAP HCP – Webinar Series 4 SAP User Groups



Agenda

1. Introducing the LoB Extension Platform

- Why Extensions and LoB Add-ons?
- What are the capabilities and use cases of HCP as the Extension Platform?

2. LoB Extension Scope with HCP

- How does the high-level architecture of Extensions look like?
- Show me HCP Extensions in action!

3. Roadmap and Wrap-up

- Roadmap
- Where to find more information

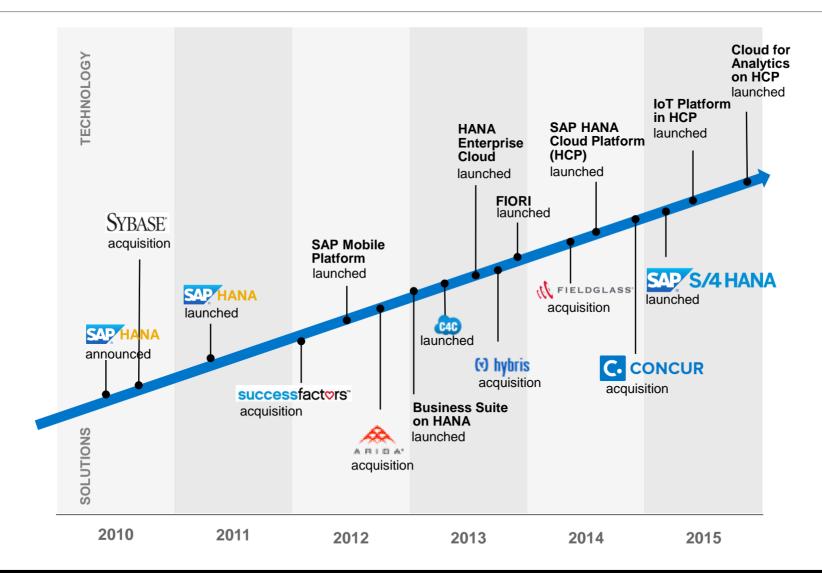




Introducing the Line of Business (LoB) Extension Platform



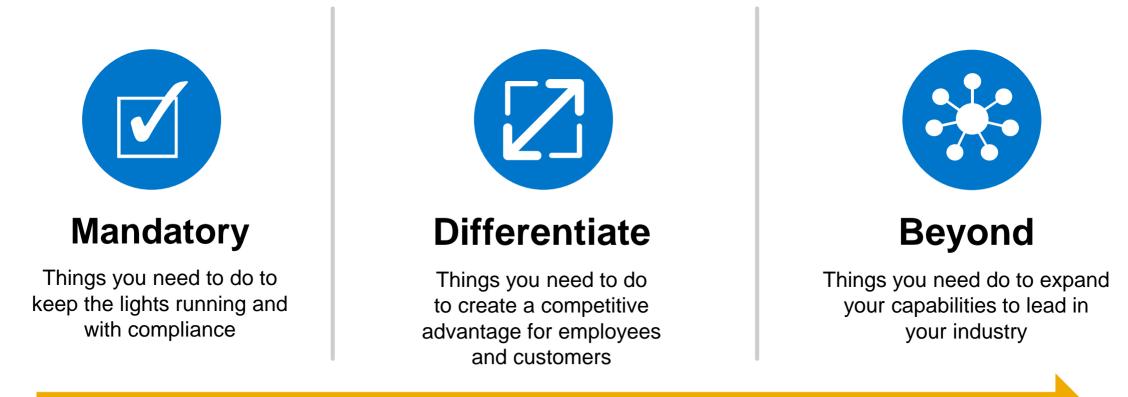
The Making of SAP HANA Cloud Platform Understanding the Past and Present of SAP Solutions and Technology



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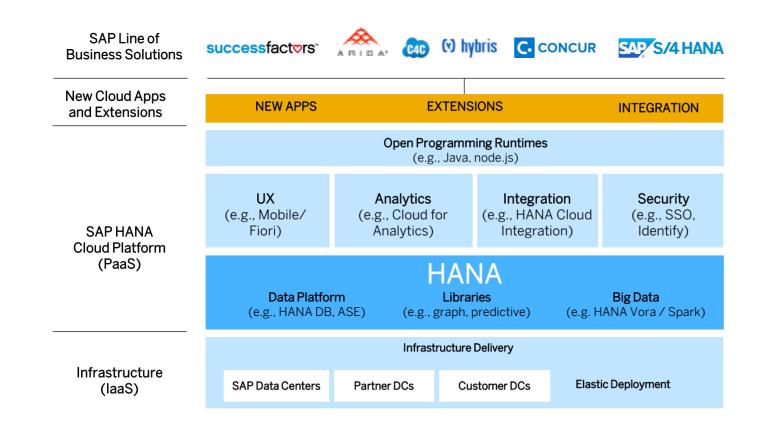
Why do we need to extend LoB solutions?

The simple business case for LoB Extensions and Add-ons



Go beyond delivered LoB solutions and configuration

HCP Extends LoB Solutions for Digital Transformation New and Extended Processes for the Business | New Apps for the Employees



#1 Market Leading LoB Solutions

Vibrant Ecosystem of Apps & Extensions

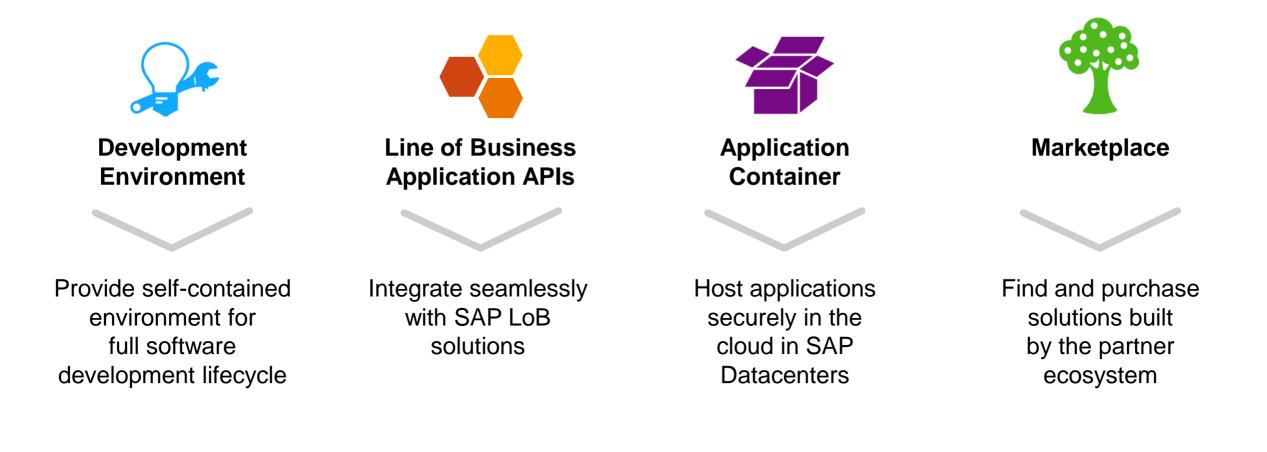
Developer and Partner Friendly

Shared Platform Services Embed SSO, Mobile and Analytics

In-Memory Database as a Service Machine Learning and Big Data

Secure and Scalable Cloud Portability

Build and Extend with SAP HANA Cloud Platform Platform-as-a-Service that creates brand new LoB capabilities



HCP Partner Program in Numbers

Scaling the Extension App Innovation through our Ecosystem

Ecosystem of HCP Innovations

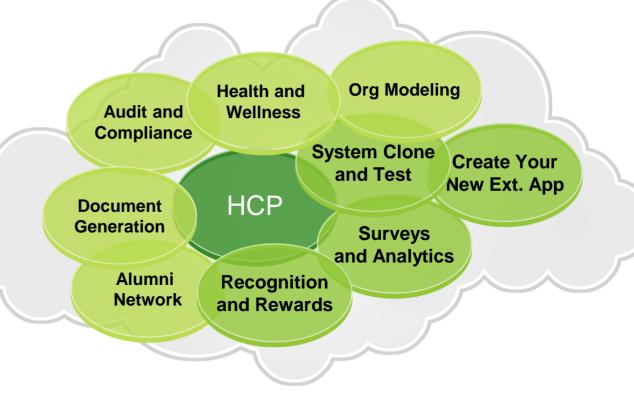
1. Over 100,000 developers joining the HCP Trial and learning via Open SAP classes on HCP and HANA

2. More than 1,000 partners officially participating in the SAP PartnerEdge program for Application Development

3. More than 350 partners subscribed for development on HANA Cloud Platform

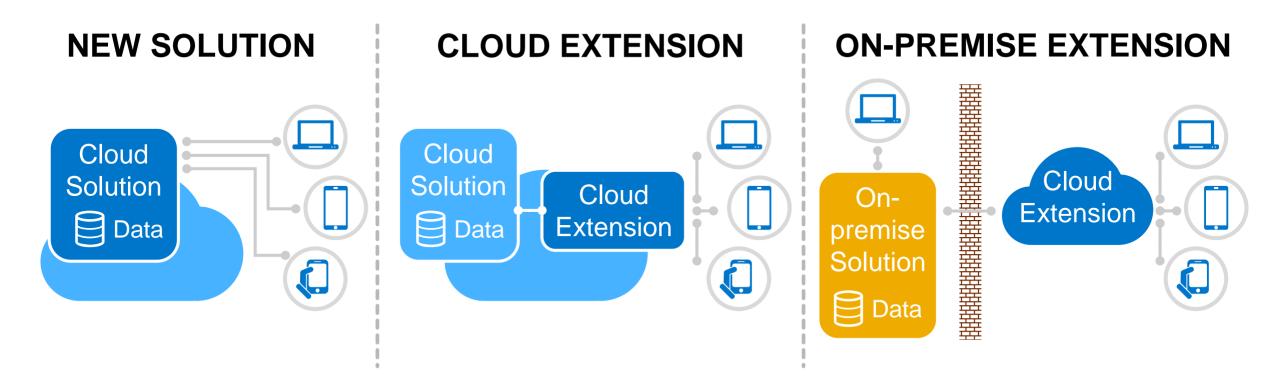
4. More than 190 partners subscribed for development on HANA native

5. More than 230 partners subscribed for development on SAP Mobile Platform



SAP HANA Cloud Platform Use Cases Overview of the High Level Use Cases

Increase business speed and agility by extending SAP value to hybrid landscapes



SAP HANA Cloud Platform Use Cases to Extend SAP Cloud Solutions

SAP HANA Cloud Platform can be used to extend existing SAP cloud solutions and to integrate them with on-premise systems.

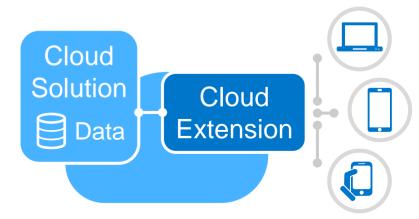
Extend SAP cloud solutions

- Build collaborative, customized business processes for SaaS
- Differentiate from competition by enabling unique business processes or industry-specific capabilities
- Seamless integration, where the extensions blends into the look & feel of the SaaS application
- Examples: SuccessFactors, SAP Cloud for Customer, Ariba and Concur (planned functionality)

Integrate cloud solutions with on-premise systems

- Use process and data integration capabilities
- Benefit from pre-packaged integration content for different SAP solutions

CLOUD EXTENSION



SAP HANA Cloud Platform Use Cases to Extend On-premise Solutions

SAP HANA Cloud Platform can be used to extend existing SAP on-premise solutions, to enable mobile scenarios and as an outbound channel to reach consumers.

Extend SAP on-premise solutions

- Innovate while keeping your core SAP solutions stable
- Extend any on-premise solution (SAP and non-SAP ERP, including SAP Business Suite and SAP S/4HANA)

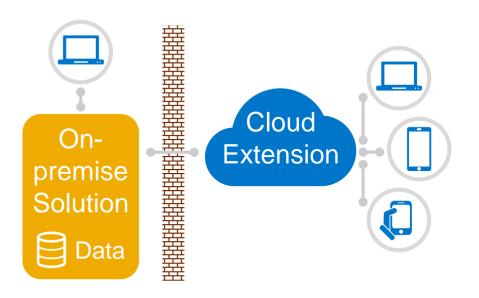
Enable mobile consumption

- Leverage mobile services
- Deploy SAP Fiori in the cloud

Extend reach towards consumers

- Build collaborative, consumer-grade applications
- Run external portals surfacing multiple applications in a consistent experience

ON-PREMISE EXTENSION





LoB Extension Scope with HCP



End-to-End View on LoB App (SaaS) and HCP (PaaS)

And the role of LoB app configurability, in-app extensibility, and HCP

LoB App Configurable Data Model (SaaS)

- Built-in extensibility
- Extend delivered objects by configuring labels, required fields, picklists, and adding customer fields
- Used by hundreds of customers.

In-App Extensibility Framework (e.g. MDF)

- Extend application with customer objects, custom UI's, Rules Engine for business logic
- No duplication of data
- No Coding Required

SAP HANA Cloud Platform (Platform as a Service)

- Create new apps or recreate your custom apps
- Custom code objects and logic
- Build engaging UIs for mobile or other channels
- Securely integrate with cloud and on-premise apps
- Access MDF as a shared service

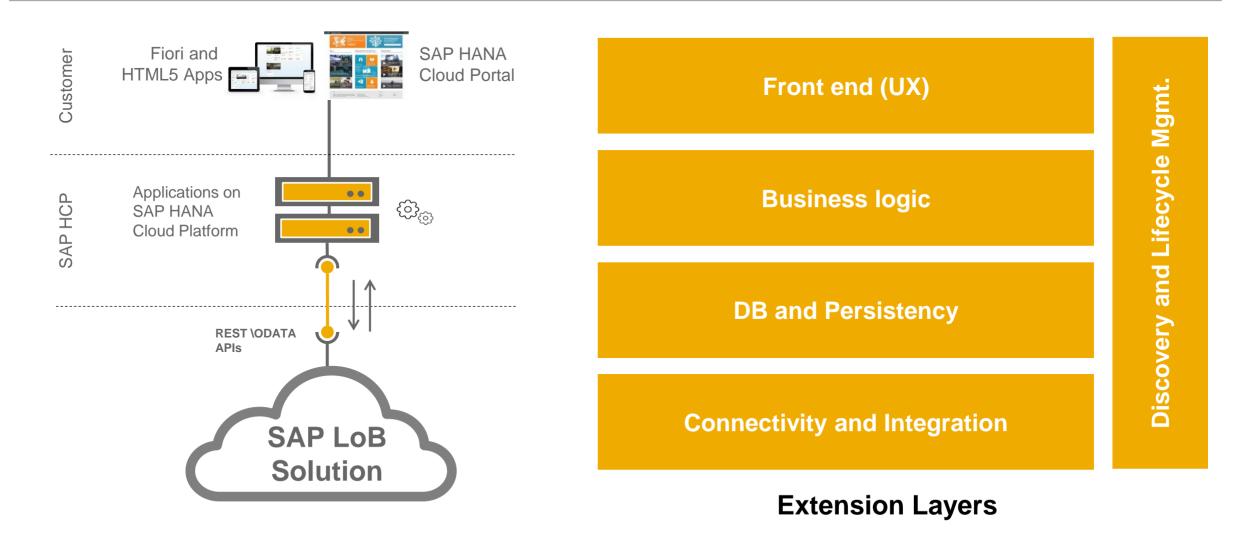




SAP HANA Cloud Platform (PaaS)

High Level Architecture of an Extension

Developing, delivering and running on HCP

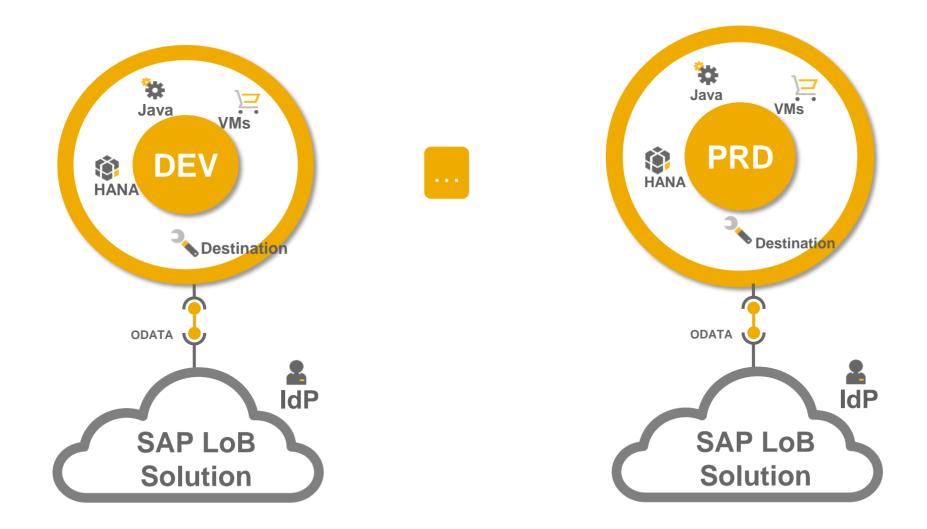


Extensions Connectivity Pairing LoB Solutions With HCP

- Automated account onboarding and detailed implementation guides
- User management, authentication and authorization coming from the LoB solution
- Configured destination and ready to use API with user propagation from HCP
- Common propagated look and feel

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Extensions Connectivity End Result: HCP Landscape Setup and Connected to LoB Solution



Extensions Integration

LoB API Strategy

- OData APIs everywhere
- OData API supports for extensions, integration, mobile, and SAP UI5
- OData API acceleration to expose all objects across the HR LoB Suite.
- Open APIs for Ariba also recently made available
- SAP API Management adoption

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The Best-Run B	usinesses Run SAP				Sitemap Global Search	Search All		
	Analytics	>	Data Management	>	Human Capital Management	Supply Chain Manager	nent	;
Help Portal	Content and Collaboratio	n 🔉	Enterprise Management	>	Product Lifecycle Mgmt	Technology Platform		;
	Customer Relationship N	lgmt 🔉	Financial Management	>	Supplier Relationship Mgmt	Additional Information		
HCM SuccessFac	tors HCM Suite APIs							
uman Capital Ma	nagement	Pls	;					
HR Renewal		Success	Factors HCM Suite					
integration add-on for and SuccessFactors H	SAP ERP HCM > CM Suite >	Employe _earning	ee Central J					
Manager self-services		Onboard	ling					
SAP Learning Solution								
AP Sports One		Succe	ssFactors HCM Suite					
AP Workforce Manageme	ent	DData A	PI Programmer's Guide		👌 English			
SAP Workforce Perform	nance Builder	General	programming guidelines		English			
SuccessFactors HCM	Suite	DData A	PI Reference Guide		👌 English			
Release Information		Entity ref	erence		English			
Analytics		SE API E	Programmer's Guide					
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Employee Central								

Extensions Integration

SuccessFactors API Roadmap overview – key themes and capabilities

Recent Innovations

API Framework

- Support OData + SAP UI5
- · Metadata Performance Improvement
- API proxies on SAP API Mangement

SAP SuccessFactors Employee Central

- Support user based and person based MDF objects in Compound Employee API
- · Support Global Assignment address

Talent / Recruiting/ Learning / Analytics

- Performance Management APIs on form sections
- · Career Development Plan (CDP) APIs
- APIs for offer approvals, applications, requisition templates, and prescreening
- SAP SuccessFactors Learning APIs for scheduled offerings, subject areas, and item ratings
- SAP SuccessFactors Workforce Analytics (WFA) APIs for internal integration

Roadmap as of March 2016. Expires June 2016.

Planned Innovations

API Framework

- · OData versioning
- · Support Compound Employee API features

SAP SuccessFactors Employee Central

- · EC2MDF for PerPerson object
- Support UI Metadata for PP3

Talent / Learning /Analytics

- SAP SuccessFactors Compensation APIs
- SAP SuccessFactors Learning API proxy on SAP API Management
- SAP SuccessFactors Workforce Analytics (WFA) API proxy on SAP API Management

Future Direction

API Framework

Support OData V4

SAP SuccessFactors Employee Central

- · APIs write capability for mobile and UI
- Migrate Compound Employee API to OData API

Analytics

 SAP SuccessFactors Workforce Analytics (WFA) APIs for customers' and partners' general use

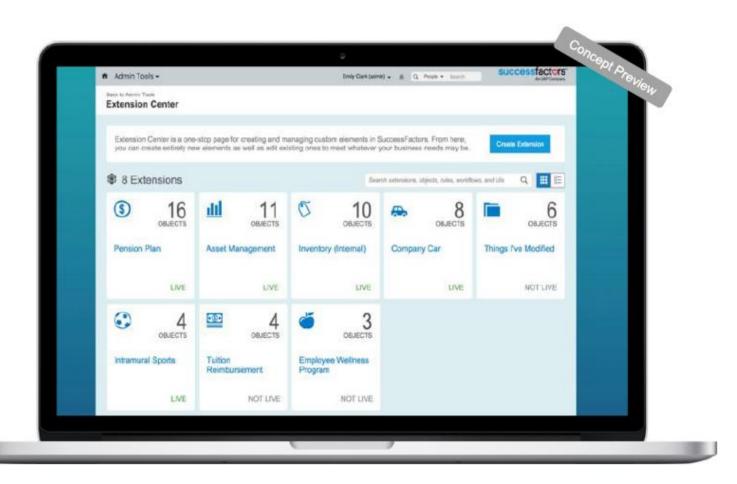
Extensions Integration

Ariba partner ecosystem & solutions extensions – roadmap

	Phase 1: Beta Launch with Select Partners	Phase 2: Publish Apps & Extensions	Future: General Availability to All Developers with Self-Service Tools
Open Partner Ecosystem	 Purchase Order, Invoice, Order Confirmation, Advanced Shipment Notice Approval Payment Execution Contract Authoring Master Data 	 Sourcing Purchase Order/Invoice Tracking/Monitoring Read API for Suppliers Spot Buy API Payment (Financing) 	 Reporting Catalog Supplier Support new Forms and Flows Payment (Virtual Cards)
Solutions Extensibility	 Forms: Forms (Single Level, Simple Logic) Flows: Purchase Order, Invoice, Order Confirmation, Advanced Ship Notice Data: Extension Framework R1 	 Forms: Forms (Multi-Level), Simple Widgets Flows: Approval, Sourcing, Contract Data: Extension Framework R2 	 Forms: Integration with SAP and Third- Party Apps, Advanced Widgets Flows: Catalog, Supplier Risk Data: Standardize Extensions for Out-of-Box Integration (e.g. ERP)
Developer Tools	 Mockbox (static data) Developer Portal (Partner registration and on-boarding) API Documentation Sample Code 	 Sandbox App Submission, Review, Approval, Publish Product Evangelism & Support Tools R1 Developer Community (e.g. Wiki) 	 Apps Purchase Partner Evangelism & Support Tools R2 Analytic Dashboard

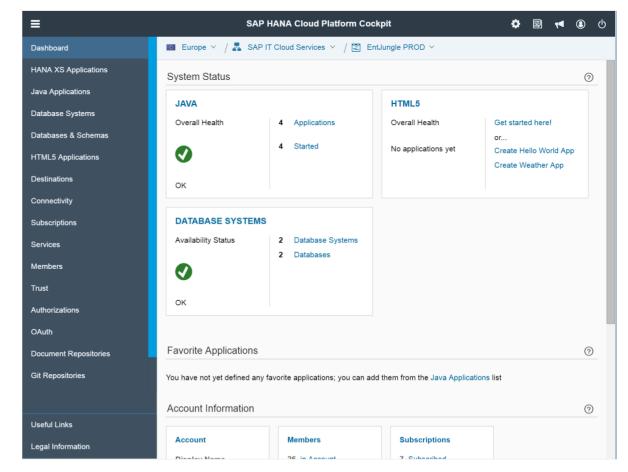
Extensions Discovery and Lifecycle Management In-App Experience for LoB Administrators

- Discovering LoB Extensions inside the Admin tools of the LoB app
- Simplified for the LoB Admin
- Combines both In App Extensibility Framework and HCP Extensions
- In App search for certified partner apps maintained by the Ecosystem
- Managing the lifecycle of Extensions



Extensions Discovery and Lifecycle Management Extensions Operations in the HCP Cockpit

- 1:1 mapping of SAP HANA Cloud Platform and LoB solution accounts
- More advanced lifecycle management of HCP Resources, such as:
- Model your own release/testing process
- Assigned Quotas, Resources and members
- Flexibility and separation of concerns
- Roadmap to provide a "Extension / Solution" view in the Cockpit representing all Ext Layers



LoB Extensions in Real World and Action SAP SuccessFactors HCM Suite + HCP Extensions for SucessFactors

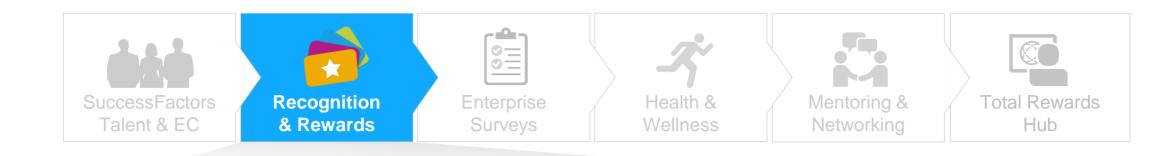


Running on SAP Cloud powered by HANA

Case 1: Boost Employee Engagement with HR Add-on Solutions SAP SuccessFactors and HCP Engagement Suite by Semos



Recognition & Rewards – JobPts.com Product Highlights



Robust HR Recognition Program

- Peer-to-Peer recognition framework with approval workflows for full governance
- Award levels can be flexibly setup and integrate corporate culture and values
- · Delightful to use on any device

Instant and All-Digital Rewards Network

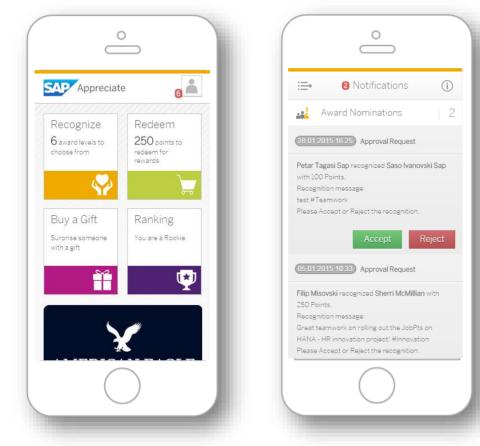
- Points system that motivates employees to achieve goals and milestones from corporate programs
- Out-of-the-box catalogues include e-gift cards and largest merchandise selection for memorable rewards
- Setup of unique rewards is possible

Built for SAP Customers on SAP HANA natively

- Security and Data Privacy all managed in SAP Data Center
- Out-of-the-box Integration with SAP SuccessFactors for employee data, social recognition, and payroll
- Advanced Reports and Analytics are all based on SAP HANA

Recognition & Rewards – JobPts.com Simple Experiences and Easy to Adapt to your HR Program

Simple UX – makes recognition simple and fun - anyone can create praise and award colleagues



Advanced Administration – adapt 100% to the needs of your HR program to motivate and engage employees

obPts Administration N	lodule
Account	Users
Activate Locations	Assign Privileges
Activate Languages	Manage Substitutes
Manage Points	Workflow Management
Assign Std. Living Index	Sync Employees
Rewards	Reports
Manage Products	Dashboard
Manage Merchants	Completed Transactions
Manage Categories	Redeemed Awards
Link Product and Category	Export Payment Report

Enterprise Surveys & Feedback – SurveyRocks.com Product Highlights



Powerful Framework

- Collect valuable data from end-user feedback
- Setup any configuration of questions and ratings for multiple survey instances.
- Support for workflow and taking follow-up actions

Simple and Reportable

- Create well-designed and contextualized surveys in minutes
- Mobile friendly: making it easy to reach employees
- Real-time analytics to check employee feedback, detect sentiment and rate of engagement

Secure and Compliant

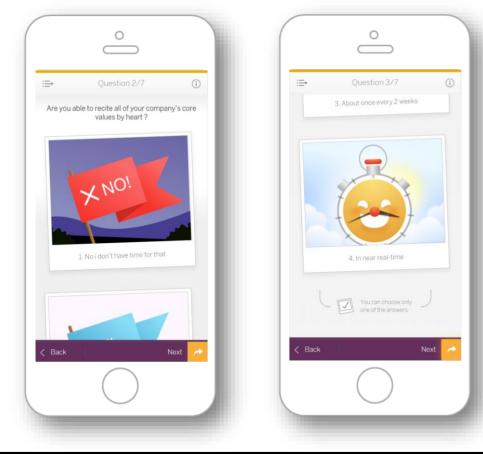
- Own your organization's data provided through surveys
- Easily manage multiple users allow single sign on through your network
- Protect data with advanced security and compliance

Recent

Innovation

Enterprise Surveys & Feedback – SurveyRocks.com Simple Experiences and Easy to Adapt to your HR Program

Simple UX – makes HR surveys effective and contextual to use for anyone to share feedback



Advanced Administration – allows for enterprise reporting, text analysis and central maintenance of all HR data

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Health Maintenance & Wellness – Healthain.com Product Highlights



Connect and Manage Any Wearable

- FitBit
- Jawbone
- Withings
- Google Fit
- Apple Watch

• ...

Leaderboard

- Team and corporate overviews
- Visual comparisons of Daily, Weekly and Monthly High Scores
- Incenting winners to earn points and rewards

Personal Wellness Goals Management

- Wellness goals definition and tracking
- Automated workflows for easy assessment
- Future support for personal trainers/ coaches

Corporate Health

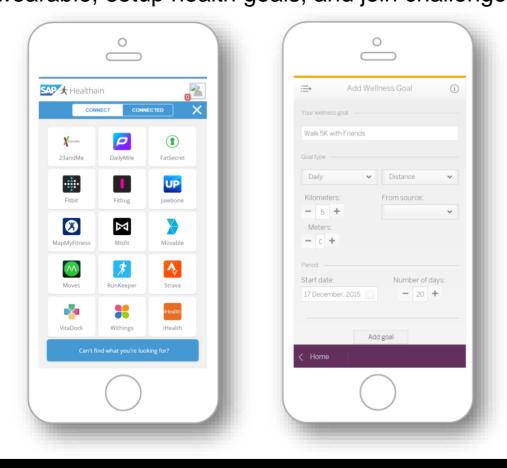
- Administrate corporate challenges to improve healthy habits
- Reduce costs spent on health care and benefits
- Future support for employee disease management

Recent

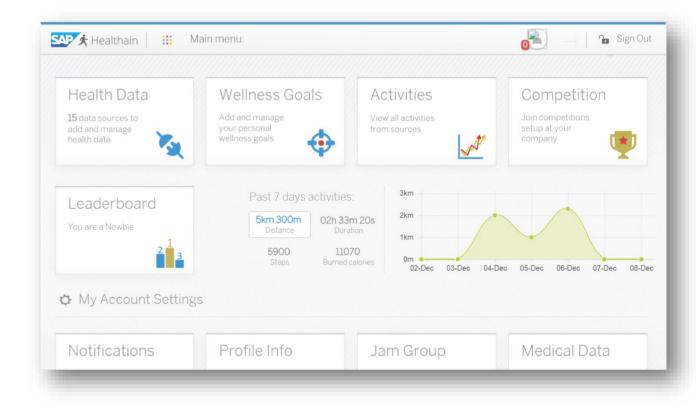
Innovation

Health Maintenance & Wellness – Healthain.com Simple Experiences and Easy to Adapt to your HR Program

Simple UX – any employee can connect to own **Advanced A** wearable, setup health goals, and join challenges workflows, as



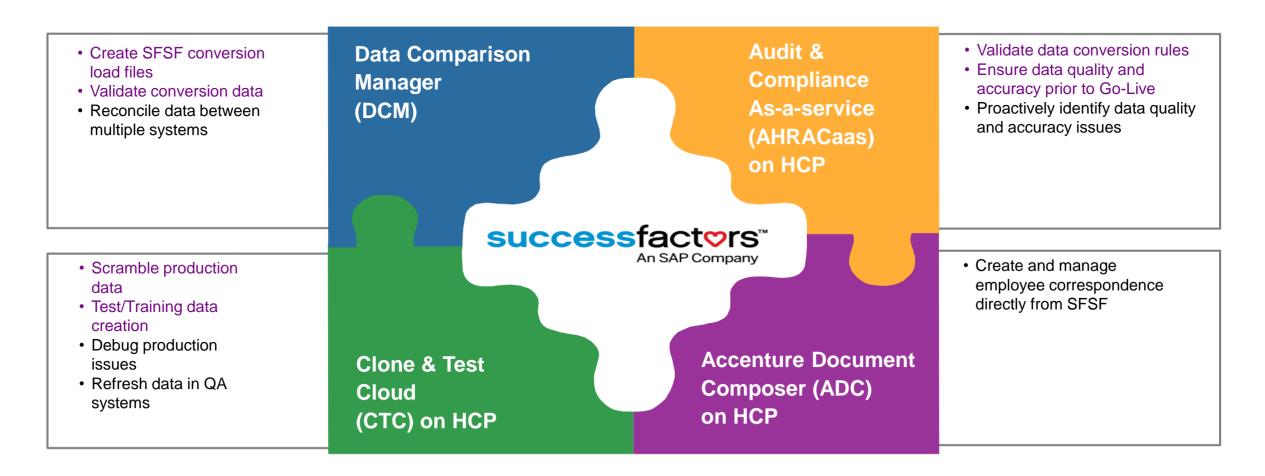
Advanced Administration – define challenges, track workflows, assign personal trainers, reports, and more



Recent

Innovation

Case 2: Improve IT & HR Productivity with HR Add-on Solutions SAP SuccessFactors and HR Productivity Tools by Accenture



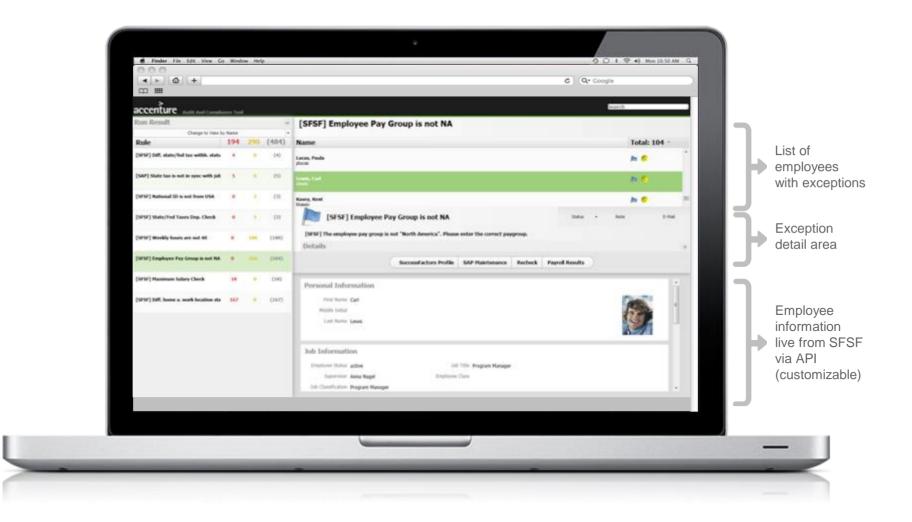
Accenture HR Audit and Compliance as a service

Improving data quality and compliance



Accenture takes SAP HANA Cloud Platform, and adds Accenture HR Audit and Compliance as-a-service to check SuccessFactors data against specific criteria. The solution offers a full service of superior auditing capabilities, standard and tailored rules, and support.

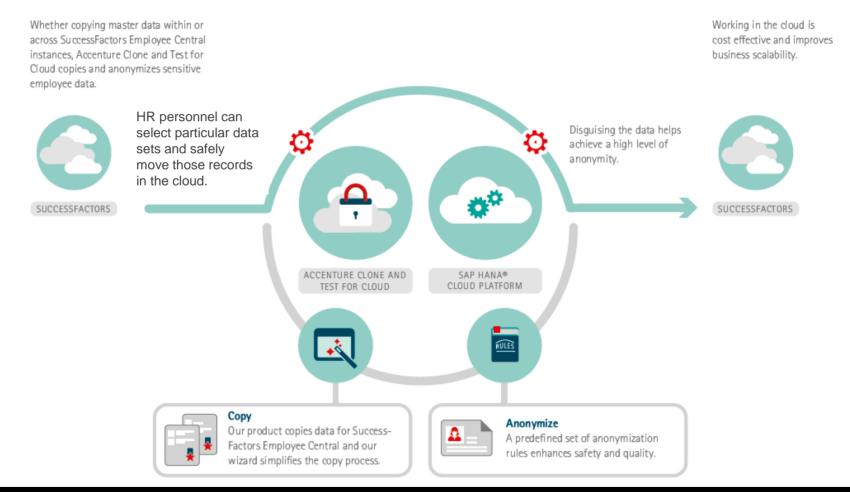
Accenture HR Audit and Compliance as-a-service: Workbench



Recent

Accenture Clone and Test for cloud

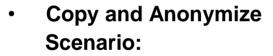
Improve data security and compliance with an application that creates, copies and anonymizes SuccessFactors Employee Central data across systems to improve quality and efficiency.



Recent Innovation

Sample use cases for Accenture Clone and est

- Anonymization in Place
 Scenario:
- QA instance is an exact copy of production
- Live data in QA needs to be scrambled



- Setup of new QA or Training instance by copying data from a mock conversion, sandbox or production instance (with or without data obfuscation)



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- Duplicate and Anonymize Scenario:
- Creation of additional test data, e.g. for Performance Testing, by replicating and scrambling existing data within one instance



HR Communications Matter

Did you know?

98%

HR processes requires documentation

80%

of enterprises have no standardized solution for document creation

82%

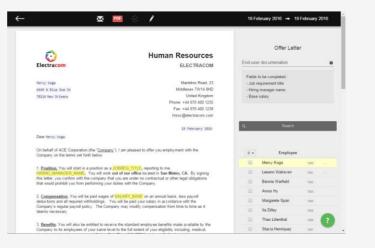
of customers take more than 30 minutes to create a document

Innovation

Accenture Document Composer simplifies and facilitates the process of the creation and distribution of employee-related communications.

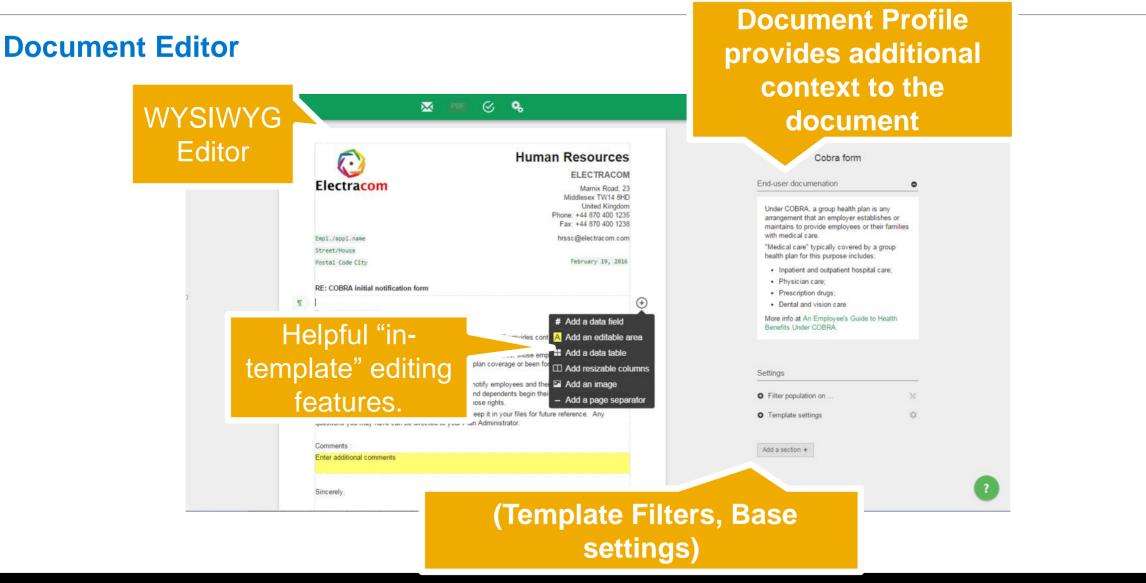
It enables users to build and manage templates easily, offering a straightforward method to merge data from SAP SuccessFactors or SAP ERP HCM systems.

Accenture Document Composer, an extension for SAP SuccessFactors on the HANA Cloud Platform, keeps all sensitive employee data within the SAP data centers



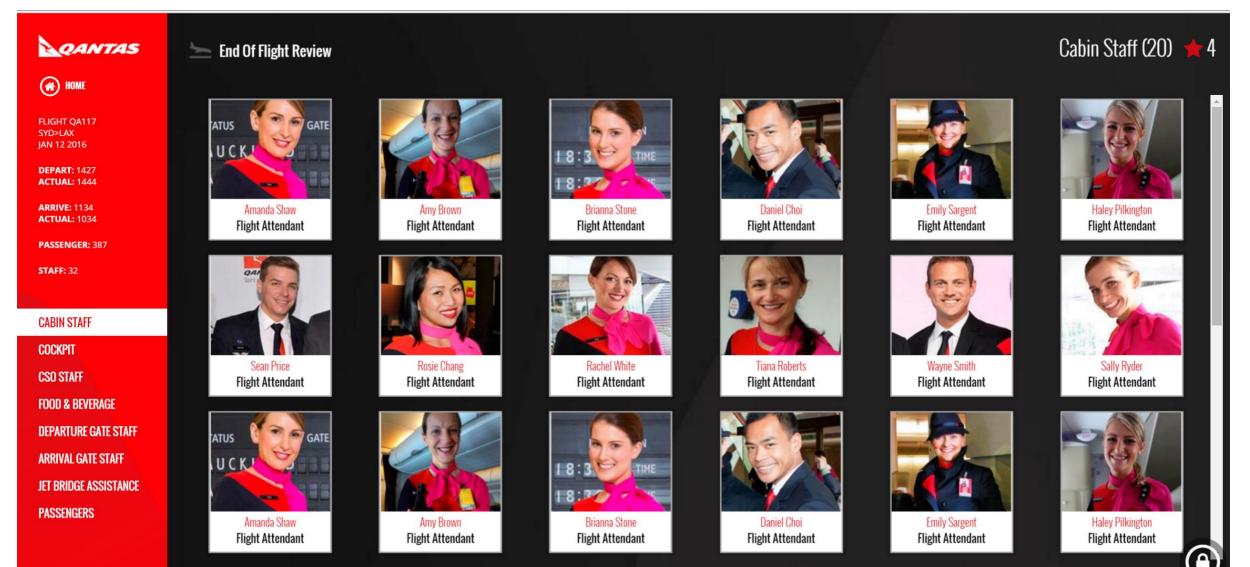


Accenture Document Composer



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Case 3: Quick Wins with Rapid Prototyping and Design Thinking Rapid Prototyping Work and Showcases with Enterprise Jungle



SAP HANA App Center Yellow Pages for all HCP Extension Apps

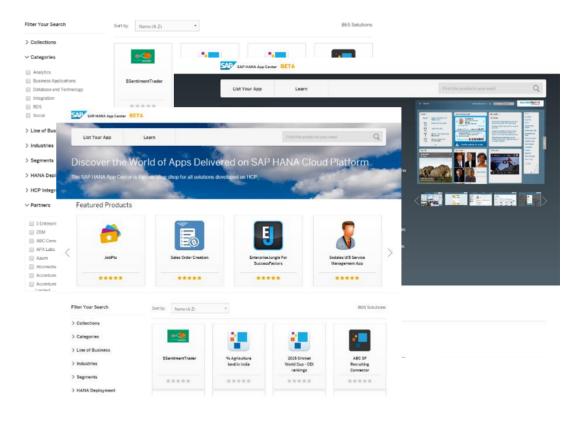
The SAP HANA App Center (a replacement to the SAP HANA Marketplace) is the single destination to discover all applications built on SAP HANA Cloud Platform, from SAP and ISV partners.

Key capabilities

- Official listing of all SAP HANA Cloud Platform applications
- Single call-to-action "Get it" button on product pages, which directs customers either to the SAP Store (to buy) or to the partner's product landing page (to learn more and/or buy)
- Low barrier to entry for partners; solutions maintained by the App Center team; listing is free and SAP certification, although a bonus and differentiation, is optional

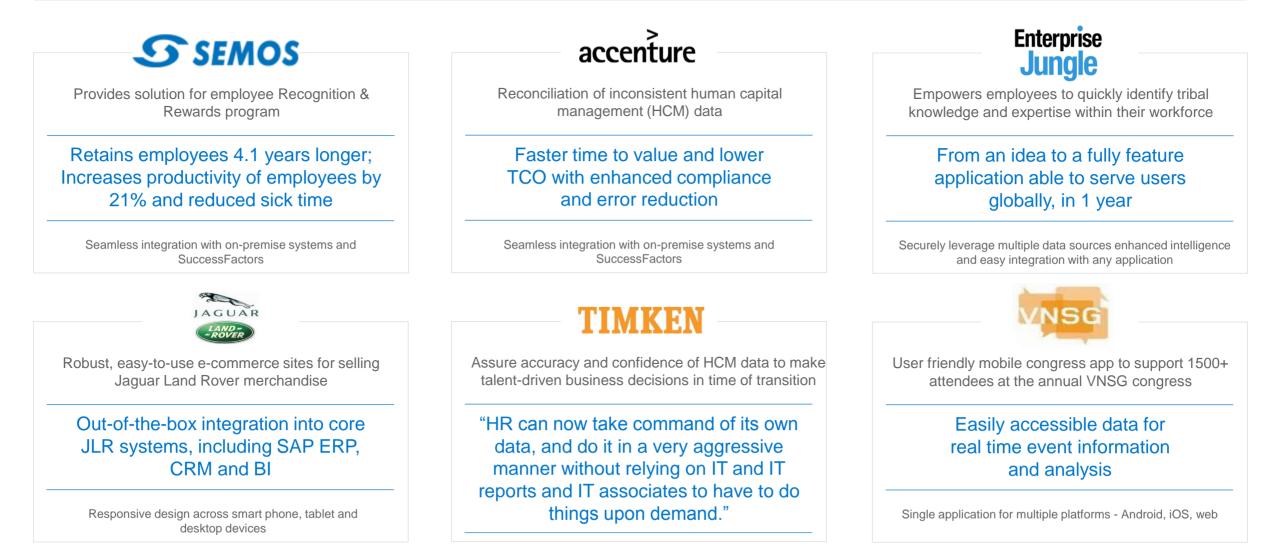
Benefits

- Close to 900 SAP HANA Cloud Platform apps currently listed
- Great place for partners to showcase their solutions, generate leads, benefit from SAP branding and marketing campaigns
- SAP Cloud applications (SuccessFactors, Jam, Cloud for Customers, etc.) will show SAP HANA Cloud Platform partner extensions in their admin views, connected to the App Center



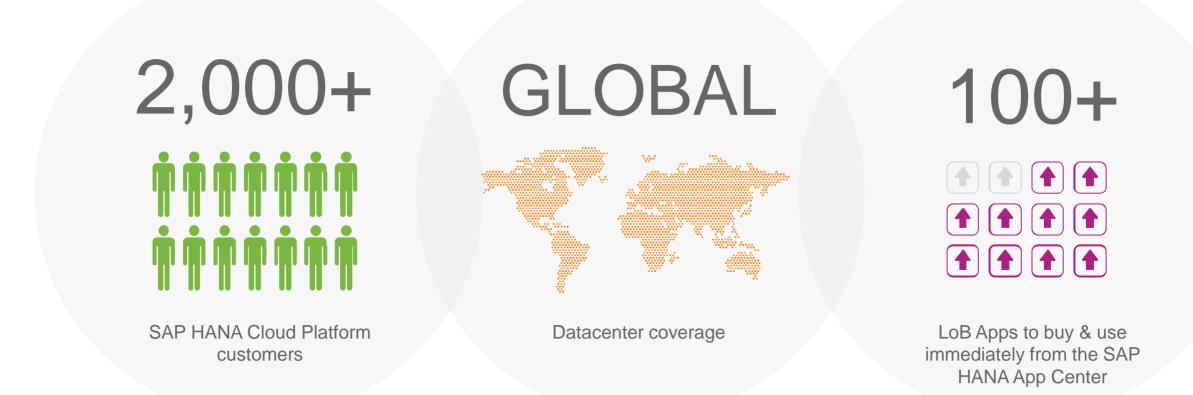
www.sapappcenter.com

SAP HANA Cloud Platform Extensions Customer References



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SAP HANA Cloud Platform: Proven. Reliable. Affordable.



CISUG YEARS OF DISRUPTION

Wrap-up



SAP HANA Cloud Platform

Product road map overview - key themes and capabilities

Today

Major Use Cases

- Build all types of business applications
- Extend SAP on-premise solutions
- Extend SAP cloud solutions
- Built applications for the Internet of Things (IoT)

Infrastructure

- World-class tier-3 and 4 data centers
- Secure and compliant infrastructure with 99.9% availability

Services

- Powerful data & storage services
 - Leverage the unique capabilities of SAP HANA
 - SAP ASE as a part of DBaaS
 - Document service (CMIS-based)
- Wide range of platform services
 - Integration, UX, analytics, collaboration, security, mobile, IoT, ...
- Business services
 - Core services, Commerce as a Service

Runtimes, Development & Operations

- Java, SAP HANA XS and HTML5 programming model
- Standards-based development environment
- Sophisticated deployment, logging, monitoring features

Planned Innovations

Additional Use Cases

- Enhanced current SAP cloud solution extensions
- New SAP cloud solution extensions

Infrastructure

- Data centers in Japan and China
- Improvements for business continuity
- · Disaster recovery data centers within regions
- Infrastructure based on OpenStack

Services

- Even more powerful data & storage services
 - New and improved SAP HANA features
 - SAP ASE with extended services
 - MongoDB, PostgreSQL, Redis, …
- Continuous improvements of existing and new platform services
 - Integration, UX, analytics, collaboration, security, mobile, IoT, ...
- Extended business services
 - Loyalty Management, Billing, …

Runtimes, Development & Operations

- Cloud Foundry-based runtimes
- SAP HANA Cloud Platform virtual machines

Future Direction

Additional Use Cases

 Support for additional use-cases based on requirements from customers and partners

Infrastructure

- Availability of SAP HANA Cloud Platform in all regions
- Support for deployments in data centers of partners / customers

Services

- Continuous improvements of existing services
- New services based on requirements from customers and partners (including Hadoop, Mail, Content Delivery Network)

Runtimes, Development & Operations

 Enhancement and extension of available runtimes based on requirements from customers and partners

This is the current state of planning and may be changed by SAP at any time.

(Q4/2015)

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Planned innovations Additional use-cases

Enhanced Extensions



Extensions for SuccessEactors

- Introduce extension tiles for SuccessFactors Home Page
- SAP HANA Cloud Platform applications to consume SuccessFactors event bus events
- SuccessFactors workflow integration



Extensions for SAP Cloud 4 Customer

- Improved API integration
- Better re-theming and rebranding of extension applications to C4C look'n'feel



Extensions for SAP Jam

- Better integration for SAP Jam external application running on HANA Cloud Platform
- Automatic provisioning of SAP Jam enabled accounts
- Automatic user profile updates when using SAP Cloud Identity



Extensions for SAP S/4HANA

- Improve capabilities for "side-by-side" extensibility of SAP S/4HANA with SAP HANA Cloud Platform
- Enhanced lifecycle management including SAP Solution Manager integration



New Extensions

Extensions for Concur



- Enable automatic SSO for extensions on SAP HANA Cloud Platform
- Align look'n'feel and UI integration for extension apps
- Expand the reach beyond Travel and Expense modules

Extensions for Ariba



- Enable SSO and API access for SAP HANA Cloud Platform extension apps
- Explore IoT related scenarios which integrate with Ariba
- Align with upcoming Ariba open APIs
- Better theming support for Ariba extensions with SAP UI5



Extensions for SAP Anywhere / B1

- SSO and API access for extension applications on SAP HANA Cloud Platform
- Introduction of Anywhere in Partner Program

Key links for more information

For customers and partners

Key links

- Road maps on SAP Service Marketplace
- SAP Community Network
- IT Planning Resources
- SAP HANA Cloud Platform

http://service.sap.com/saproadmaps

http://sdn.sap.com

https://service.sap.com/~sapidb/011000358700001160122012E

http://hcp.sap.com

Where to go to provide product feedback and ideas

- SAP Idea Place
- Influence programs
- SAP User Groups

http://ideas.sap.com

http://service.sap.com/influence

http://sapusergroups.com



Thank you

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